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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO:	CONFIRMATION NO.
09/662,580	09/15/2000	Douglas N. Knisely	7-4-28	2012

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LUCENT TECHNOLOGIES INC.  
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EXAMINER

KLIMACH, PAULA W

ART UNIT	PAPER NUMBER
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2135

DATE MAILED: 04/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/662,580	Applicant(s) KNISELY ET AL.	
	Examiner Paula W Klimach	Art Unit 2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 January 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. **Claim 1, 3, and 9** are rejected under 35 U.S.C. 102(e) as being anticipated by Marvit et al (6,625,734 B1).

*In reference to claim 1*, Marvit discloses a system in which a user is provided with a communication key (column 5 lines 36-38). The communication key is provided to the user over a first network (Fig. 1 part 110) and the user communicates using the key over a second network (Fig. 1 part 108 in combination with column 4 lines 10-26).

*In reference to claim 3*, the key sent to user 102 by the key repository 106 is used to encrypt the message to user 104 (column 5 lines 38-45).

*In reference to claim 9*, Marvit discloses a message being sent from user 102 to user 103. It is inherent data should be sent using a message from on device to another therefore, the message sent from user 102 to 104 is a data communication sent on the second network, making the link 108 a data communication network.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 2, 4, and 11-14, 19, 20-28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Marvit as applied to claim 1 above, and further in view of the book by Stallings.

*In reference to claims 2 and 4*, Marvit does not disclose the key sent to user 102 being an authentication key.

However Stalling discloses an authentication key being encrypted and sent to an initiator A (Fig. 5.9):

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to send a user an authentication key from a central key distribution center as disclosed by Stalling in the system disclosed by Marvit. One of ordinary skill in the art would have been motivated to do this because then the second user will know that the information is authentic and has originated from the key repository.

*In reference to claim 11*, Marvit discloses a system in which a user is provided with a communication key (column 5 lines 36-38). The communication key is provided to the user over a first network (Fig. 1 part 110) and the user communicates using the key over a second network (Fig. 1 part 108 in combination with column 4 lines 10-26).

However, Marvit does not disclose a system wherein the first network securely transmits the key using a ciphering key.

Stalling discloses a system wherein the first network (the Initiator A and the Key distribution center KDC) provides a key ( $E_{kb}$ ) using a ciphering key ( $E_{ka}$ ).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use a ciphering key to encrypt the key before transmission as disclosed by Stalling in the system of Marvit. One of ordinary skill in the art would have been motivated to do this because it would discourage eavesdroppers from determining the key.

*In reference to claims 12-14*, Stalling discloses an authentication key ( $E_{kb}$ ) being encrypted and sent to an initiator A (Fig. 5.9) and an encryption key ( $E_{ks}$ ).

*In reference to claim 19*, Marvit discloses a first network and a second network. However, Marvit does not disclose a key provided to a user over a first network for communication over the second network.

Stalling discloses a key provided by the key distribution center to the Initiator A ( $E_{ks}$ ) for communication with the Responder B.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to provide a key over one network for the communication over another network as in Stalling in the system disclosed by Marvit. One of ordinary skill in the art would have been motivated to do this because it would increase security to change the keys often and it would decrease cost to change the keys at a central distribution center.

*In reference to claim 20*, the key in Stalling is provided securely because it is encrypted using the master key belonging to Initiator A (Fig. 5.9).

*In reference to claims 21-23* Stalling discloses an authentication key ( $E_{kb}$ ) being encrypted and sent to an initiator A (Fig. 5.9) and an encryption key ( $E_{ks}$ ).

*In reference to claim 24*, Marvit discloses using the communication key for communication with the user over a second communication network (Fig. 1 part 108).

However Marvit does not disclose providing a communication key to a first communication network for deliver to a user.

Stalling discloses proving a communication key ( $E_{Ks}$ ) to a first communication network, Initiator A and key distribution center, for communication with a user (Responder B).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use a ciphering key to encrypt the key before transmission as disclosed by Stalling in the system of Marvit. One of ordinary skill in the art would have been motivated to do this because it would discourage eavesdroppers from determining the key.

*In reference to claim 25*, the communication key is provided for secure delivery to the user by encrypting the key using ( $E_{Kb}$ ).

*In reference to claims 26-28*, Stalling discloses an authentication key ( $E_{Kb}$ ) being encrypted and sent to an initiator A (Fig. 5.9) and an encryption key ( $E_{Ks}$ ).

3. **Claims 5-8, and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Marvit as applied to claim 1 above, and further in view of Newton.

*In reference to claims 5-8*, Marvit does not disclose the first network being CDMA, TDMA, GSM, or AMPS.

Newton discloses the use of networks CDMA, TDMA, GSM, and AMPS for cellular phone communication systems.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use existing cellular phone communication systems as disclosed by Newton in the system by Marvit. One of ordinary skill in the art would have been motivated to do this because using the pre-existing systems will enable a user to communicate with other users that communicate using the systems.

*In reference to claim 10*, Newton discloses cellular phone communication systems that are used for voice communication and are therefore voice communication networks.

4. **Claims 15-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Marvit and Stalling as applied to claim 1 above, and further in view of Newton.

*In reference to claim 15*, Marvit discloses a system in which a user is provided with a communication key (column 5 lines 36-38). The communication key is provided to the user over a first network (Fig. 1 part 110) and the user communicates using the key over a second network (Fig. 1 part 108 in combination with column 4 lines 10-26).

However, Marvit does not disclose a system wherein the first network securely transmits the key using a ciphering key.

Stalling discloses a system wherein the first network (the Initiator A and the Key distribution center KDC) provides a key ( $E_{Kb}$ ) using a ciphering key ( $E_{Ka}$ ).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use a ciphering key to encrypt the key before transmission as disclosed by Stalling in the system of Marvit. One of ordinary skill in the art would have been motivated to do this because it would discourage eavesdroppers from determining the key.

Marvit and Stalling do not disclose the first network being CDMA.

Newton discloses the use of networks CDMA for cellular phone communication systems.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use existing cellular phone communication systems as disclosed by Newton in the system by Marvit. One of ordinary skill in the art would have been motivated to do this because using the pre-existing systems will enable a user to communicate with other users that communicate using the systems.

*In reference to claims 16-18*, Stalling discloses an authentication key ( $E_{Kb}$ ) being encrypted and sent to an initiator A (Fig. 5.9) and an encryption key ( $E_{Ks}$ ).



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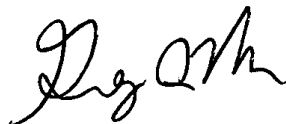
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paula W Klimach whose telephone number is (703) 305-8421. The examiner can normally be reached on Mon to Thr 9:30 a.m to 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (703) 305-4393. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PWK  
Monday, April 05, 2004

  
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